REMARKS

Applicant submits this reply to the Office Action dated October 14, 2005. In view of the foregoing amendments and the following remarks, it is submitted that the application is in condition for allowance, and the Examiner is respectfully requested to allow the claims.

In this application, a request for continued examination (RCE) was filed in response to the Final Action of March 29, 2005 and the Advisory Action of August 18, 2005. The Office Action of October 14, 2005 (hereinafter "the Office Action"), to which this Reply is directed, rejected claims 1-6 as amended in applicant's Response to the Final Action prior to the RCE.

Specifically, the Office Action rejected claims 1-6 under 35 U.S.C. 102(b) as being anticipated by Schwab et al. (U.S. 5,922,103). As to apparatus claims 1-4, the Office Action asserted that the last five lines of claim1 and the language of dependent claims 2-4 recited process limitations that were not considered to carry patentable weight since they allegedly did not further limit the apparatus structurally.

To address the concern expressed in the Office Action regarding mixing process limitations with apparatus elements, applicant has amended claims 1-4 to recite that the controller has means for respective functions recited in the claims. 35 U.S.C. 112, ¶ 6 provides:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Thus, the means-plus-function language now employed in claims 1-4 limits the claimed apparatus structurally. Accordingly, the Examiner is respectfully requested to give the claim language proper patentable weight as required under 35 U.S.C. 112, ¶ 6.

Once the means-plus-function elements are given proper patentable weight, claims 1-4 as amended are not anticipated by Schwab and should therefore be allowable. In this regard, independent claim 1 has been amended to provide patentable distinctions from the Schwab reference. Specifically, the claims as amended recite that the controller has means for performing the functions of calculating a desired valve position for the liquid flow valve based

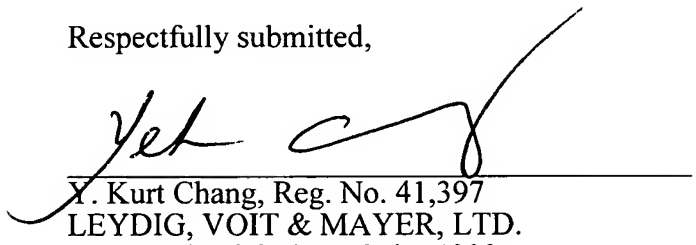
on the PID algorithm previously recited in claim 2, and supplying a control signal to the liquid flow valve to adjust the valve position to the desired valve position. As already pointed out in the previous Response, Schwab teaches adjusting the spray only when the difference between the measured gas temperature and the target temperature exceeds a predetermined amount. Col. 4, lines 18-23. Schwab does not teach or suggest the use of the PID algorithm for calculating a desired valve position as recited in claim 1 as amended. Independent claim 5, which is a process claim, is also amended to include the act of calculating the desired valve position based on the PID algorithm. Since this feature is not found or suggested in Schwab, claims 1 and 5 should be allowable over Schwab. The other claims all depend from claims 1 and 5, respectively, and should also be allowable for at least this reason.

In this regard, with respect to the PID algorithm previously set forth in claim 2, the Office Action stated that the algorithm had not been given patentable weight "since the use of the particular equation by a known controller does not further limit the apparatus structurally." It is submitted that this assertion has now been rendered moot by the use of means-plus-function language in the claims to structurally limit the claimed apparatus. Furthermore, it is well settled in the case law established by the Federal Circuit that a device, even in the form of a general purpose computer or microprocessor, when programmed to carry an algorithm, is considered to be a "new machine." *See, e.g., WMS Gaming Inc. v. International Game Technology*, 184 F. 3d 1339 (Fed. Cir. 1999) (a general purpose computer becomes a special purpose computer once it is programmed to perform particular functions). Accordingly, the claim language concerning the algorithm previously recited in claim 2 and now included in claims 1 and 5 must be given proper patentable weight.

Conclusion

Applicant submits that the claims presented herein are patentable. The Examiner is respectfully requested to enter the amendments, and prompt and favorable consideration is earnestly solicited.

Respectfully submitted,



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